

REMARKS

2. Claims 1-9 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-7 of co-pending Application No. 10/762,103 in view of U.S. Patent No. 3,700,537 ("Scher").

The rejection provides that claims 1-9 are not patentably distinct from claims 1-7 of co-pending application 10/762,103. No claims have been allowed in co-pending application serial number 10/762,103. Consequently, applicants respectfully submit that it is premature to determine the necessity of a terminal disclaimer with respect to the cited application. Once a claim is allowed (but for the obviousness double-patenting rejection) in one of the two patent applications, the merit of the present rejection can be evaluated as between the allowed claim and the pending claims in the other application. Applicants therefore respectfully request that the present rejection be held in abeyance until one or more claims are allowed in one of the aforesaid applications.

3. Claims 1-9 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent 7,179,538 alone, or in view of U.S. Patent No. 4,132,821 ("Hiers").

According to the double patenting rejection, "the patent" contains all of the limitations of the instant claims "despite a wording of backing layer vs. substrate, they have the same meaning". Applicants respectfully disagree.

With respect to "the patent", applicants assume that the double patenting rejection is based on claims 1-5 of the '538 Patent. Claim 1 of the '538 Patent recites a *flexible* heat and pressure consolidated laminate that comprises in superimposed relationship: 1) a *flexible* backing layer containing a polyester impregnated sheet; 2) a decorative layer; and 3) a flexible overlay, all of which layers are consolidated into a laminate.

Claim 1 of the present application, in contrast, recites a heat and pressure consolidated laminate comprising in superimposed relationship: 1) a decorative layer; 2) a substrate having a first surface and a second surface opposite one another; 3) an underlay layer disposed between the leather decorative layer and the first surface of the substrate; and 4) a backer layer disposed adjacent the second surface of the substrate, all

of which elements are consolidated into a laminate. The laminate recited in claim 1 is shown in FIG. 1 of the present application:

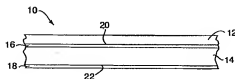


FIG. 1

Comparing the two claim 1s, it can be seen that the claim 1 of the '538 Patent recites a flexible laminate that includes a flexible overlay (for definition and application of "overlay layer", see col. 3, lines 11-20), and a flexible backing layer. Claim 1 of the present application does not recite a flexible laminate, or a laminate having a flexible overlay or a flexible backing layer. Regarding the suggestion that the terms "backing layer" and "substrate" have the same meaning, applicants respectfully disagree. Claim 1 of the present application clearly recites both a backing layer and a substrate disposed in particular arrangement within the laminate, thereby distinguishing one from the other. In addition, the two elements are clearly different based on their definition within the specification.

Claim 6 of the present application, in similar manner also recites a heat and pressure consolidated laminate comprising in superimposed relationship: 1) a first decorative layer; 2) a substrate having a first surface and a second surface opposite one another; 3) a first underlay layer disposed between the first leather decorative layer and the first surface of the substrate; 4) a second decorative layer; and 5) a second underlay layer disposed between the second leather decorative layer and the second surface of the substrate, all of which elements are consolidated into a laminate. The laminate recited in claim 1 is shown in FIG. 3 of the present application:

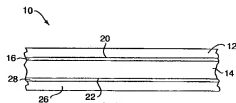


FIG. 3

Furthermore, claims 4 and 9 of the present application provide that the substrate is selected from the group consisting of plywood, particleboard, or medium density fiberboard. According to the '538 Patent, the term "flexible" is defined to mean materials

that remain substantially flaccid, and have the ability to be conformed to two or three dimensional features. A laminate having a substrate selected from the identified group cannot fairly or reasonably be characterized as being flaccid or conformable.

From the above, it can be seen that the laminates recited in claims 1-9 of the present application are patentably distinct from, and not obvious in view of, the flexible laminate recited in claims 1-5 of the '538 Patent. Consequently, applicants respectfully request the obviousness-type double patent rejection be withdrawn.

4. Claims 1-9 are objected to for informalities. Specifically, the term "leather decorative layer" is objected to within claims 1-9. The objected to phrase was found in claims 1 and 6, which have now been amended to eliminate the aforesaid phrase. Consequently, applicants respectfully request this objection be withdrawn.

5. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, the rejection alleges that the specification does not provide any teaching or discussion of a thermosetting resin migrating from an underlay layer. Applicants respectfully disagree.

Claims 1 and 6 both recite underlay layers containing one or more cellulosic sheets impregnated with a thermosetting resin. Paragraph [0022] of the present application describes that "[i]n both manufacturing processes, the elevated temperature and pressure environment causes the impregnated resins to flow, which consolidates the constituents into the integral leather laminated decorative panel 10". It is clearly described within the present application, therefore, that resin impregnated within a layer such as an underlay layer, will flow/migrate from the underlay layer into adjacent layers such as a decorative layer consisting essentially of a leather material.

For at least these reasons, applicants respectfully submit that the written description requirement of the present application is in fact satisfied, and ask that the rejection be withdrawn.

6. Claims 1-3 and 5-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,440,538 (“Ungar”) in view of U.S. Patent No. 1,672,537 (“Novak”).

The rejection provides that Novak teaches a floor covering “built of plys of leather shavings as the surface coat” and that the surface coat is equivalent to a decorative layer consisting essentially of a leather material. To arrive at the claimed laminate, the rejection provides that it would have been obvious to one having ordinary skill in the art to have modified the printed paper wear layer of Ungar to use, incorporate, or substitute an improved paper leather material as taught by Novak. Finally, the rejection provides that “[b]ecause Ungar was also concerned with abrasion resistance (see the title), it would have been expected that the incorporation of the leather material for the reasons Novak taught successfully envisages the instant invention”. Applicants respectfully disagree with the characterization of the references and the rejection based thereon.

A claimed invention is unpatentable if the differences between it and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person of ordinary skill in the art.” 35 U.S.C. §103(a); *Alza Corporation v. Mylan Laboratories, Inc.*, 464 F.3d 1286, 1288 (Fed. Cir. 2006) (citing *In re Kahn*, 441 F.3d 977, 985 (Fed. Cir. 2006) and *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 13-14 (1966)). “Most inventions arise from a combination of old elements and each element may often be found in the prior art. However, mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole.” *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006), citing *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998) “Such a combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1734 (U.S. 2007) (quoting *Graham*, 383 U.S. at 15). The analysis should be made explicit. “[R]jections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d at 988

Ungar discloses an abrasion resistant laminate that includes a wear-resistant top layer assembly 5, an adhesive layer 9, and a base layer 10. The wear-resistant layer 5

includes an overlay layer 6, a decorative layer 7, and a core layer 8. The base layer 10 is adhered to the wear-resistant layer 5 by the adhesive layer 9. (col. 4, lines 10-21) The decorative layer 7 is a printed or colored paper which may or may not be treated with a resin. (col. 6, lines 64-65)

Novak discloses a floor covering that includes a surface ply and a base ply. The base is a fibrous material. A representative example of a surface ply includes the following:

- 60 parts chrome leather shavings,
- 40 parts cotton or jute,
- 125 parts wood flour or cork,
- 50 parts coloring pigments,
- 500 parts dry varnish-1 part linseed oil, part copal,
- 200 parts clay,
- 50 parts sodium silicate,
- 50 parts alum. (col. 2, lines 73-81).

Hence, leather shavings comprise 60 of the 1097 parts, or 5.5% of the constituent parts listed within the example.

It can be seen, therefore, that Novak does not teach a floor covering "built of plies of leather shavings as the surface coat" as is suggested in the rejection. In fact, Novak teaches a floor covering with a single surface ply that comprises a very small amount of leather shavings (e.g., 5.5%). Furthermore, the surface ply taught by Novak (e.g., comprising 5.5 % of leather shavings) is not equivalent to a decorative layer *consisting essentially of a leather material* as is recited in the present claims. Consequently, the combined teachings of the cited references do not arrive at the claimed laminate.

With respect to the suggestion in the rejection that it would be obvious to combine the leather material of Novak with the laminate of Ungar because Ungar and Novak were concerned with abrasion resistance, applicants respectfully refer to the specification of Novak which provides:

The floor covering which is the subject of this invention, has a superior wearing surface to the linoleum and floor coverings now commonly used in that it has higher resistance to abrasion due to the higher binder proportion... (col. 1, lines 40-46)

The above passage is clear that the higher abrasion resistance of the floor covering of Novak is due to the higher binder proportion. There is no disclosure within Novak that the leather shavings, and in particular the very small percentage of the leather shavings, play any part in the abrasion resistant characteristics of the floor covering of Novak. Consequently, there is no basis for the suggestion that leather shavings of Novak could be combined with the laminate of Ungar for purposes of providing an abrasion resistant surface.

For at least the reasons provided above, applicants respectfully request that the rejection be withdrawn and the present application be passed to allowance.

11. Claim 4 is rejected under 35 U.S.C. §103(a) as being unpatentable over Ungar in view of Novak and further in view of U.S. Patent No. 6,324,809 ("Nelson").

Applicants respectfully direct the Examiner to the remarks above regarding the proposed combination of Ungar and Novak. For at least those reasons, applicants respectfully submit that claim 4 is not obvious in view of the cited references and request the rejection be withdrawn.

16. Claims 1-3 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 3,700,537 ("Scher") in view of U.S. Patent 5,811,122 ("Schlup") or U.S. Patent 5,344,692 ("Schmooch"), or alternatively in view of Hiers.

Scher in view of Schlup:

Scher discloses a laminate having a print sheet 16 to provide a decorative background, and an embedment sheet 18 having an opening passing therethrough. (Col. 5, lines 1-54) Scher indicates that it is desirable to "produce high pressure laminates with deeply embossed surfaces that duplicate natural products such as slate, leather, and wood" (Col. 2, lines 47-56), and that it is an object of the invention to produce such laminates in a simplified and inexpensive manner. Hence, Scher teaches that it is desirable to produce an inexpensive, high pressure laminate that duplicates, *but does not use*, a natural product such as slate, leather or wood. There is no disclosure within Scher

that a high pressure laminate could be made less expensively by substituting a natural material such as leather in place of a cellulosic print sheet made to look like leather. On the contrary, Scher goes to great lengths to disclose embossing techniques operable to create a laminate that looks like but is less expensive than a laminate with a leather decorative layer.

Schlup, conversely, discloses a leather composite material formed by in situ polymerization of polymer precursors fully impregnated into the leather. The stated purpose of the composite material formed by in situ polymerization is to provide a leather material with improved bulk material properties (e.g., toughness, strength, modulus). (Col. 10, lines 28-33) The leather is first fully impregnated with a solvent. According to Schlup, the term "fully impregnated" means "that the interstitial void spaces between the collagen fibers existing throughout the entire thickness of the collagen fiber network of the hide/leather have been substantially filled with the polymer system precursor solution during impregnation." (Col. 9, line 62-66) According to Schlup, a precursor solution containing polymer precursors is subsequently applied to the leather in a fashion that permits full impregnation of the precursor solution throughout the leather. (Col. 3, line 40 to Col. 4, line 53) The fully impregnated leather is subsequently processed to cure the polymer system.

There is no disclosure within Schlup that the disclosed leather/polymer composite material is or can be used within a high pressure laminate.

Claims 1 and 6 each recite a heat and pressure consolidated laminate that includes, *inter alia*, a decorative layer consisting essentially of a leather material and an underlay layer that contains one or more cellulosic sheets impregnated with a thermosetting resin. The leather decorative layer is bonded to the underlay layer along a surface of the leather decorative layer by thermosetting resin migrated from the underlay layer. The leather decorative layer is not fully impregnated with a polymer system as is disclosed within Schlup, and therefore intentionally does not have the bulk properties that are associated with a fully impregnated and cured leather layer. Indeed, the desirability of having the leather decorative layer is the feel, smell and touch of the leather decorative laminate. Neither the embossed paper of Scher nor the fully impregnated leather layer of Schlup provides such desirable qualities.

As stated above, Scher teaches that it is desirable to produce an inexpensive, high pressure laminate that duplicates a natural product such as slate, leather or wood. To arrive at such a product, Scher discloses embossing techniques operable to create a laminate that looks like but is less expensive than a laminate with a leather decorative layer. Hence, Scher provides inexpensive alternatives to a laminate that includes a leather decorative layer and therefore teaches away from including a leather decorative sheet.

Schlup discloses a leather/polymer composite that is fully impregnated and fully cured. The leather/polymer composite sheet of Schlup would not, therefore, be capable of being consolidated into a high pressure laminate from a build up of sheets impregnated with B-stage resin as is taught by Scher (col. 2, lines 1-3). No covalent bonds would form between the fully cured resin of the Schlup composite and the partially cured resin of the Scher laminate sheets, and the combined laminate would likely delaminate easily. Hence, the disclosures of Scher and Schlup teach away from the proposed combination.

In addition, Schlup discloses a leather composite material formed by in situ polymerization of polymer precursors fully impregnated into the leather to provide the leather material with improved bulk material properties (e.g., toughness, strength, modulus). Schlup discloses that the full impregnation and subsequent polymerization of the leather significantly changes the leather, and gives the example that leather treated thereafter has markedly reduced ability to absorb and permeate water vapor. As indicated above, the advantage of including a leather decorative sheet within a laminate as is recited in claims 1-9, is that the leather decorative sheet is bonded but still retains the look, feel, and smell of natural leather. Hence, Schlup teaches away from the proposed combination by disclosing a leather product unsuitable for the claimed laminate.

The rejection provides that it would have been obvious to one having ordinary skill in the art to have modified the composite of Scher to use the leather material of Schlup for the purpose of improving several properties surrounding those effected by heat and pressure namely, toughness, machinability, compressibility, and sealing where such an improvement in laminated composites is needed in the hide and leather industries as taught by Schlup. Applicants respectfully disagree. Although Schlup discloses that leather may be treated to improve the aforesaid properties, these properties do not provide

a rationale for combining the teachings of Scher and Schlup. Schlup provides no reason to incorporate a decorative layer consisting essentially of a leather material into a laminate, and the claimed laminate would not be predictable in view of the teachings of Scher and Schlup. This is particularly true in view of the teaching away by the references described above (e.g., Scher's teaching to use paper in place of leather).

The rejection places great emphasis on the disclosure within Scher that "[w]ith respect to the woven embodiment 18, this may be of almost any construction", apparently interpreting that line to mean that the woven embodiment may be any material whatsoever. That interpretation is neither fair nor reasonable, and is contradicted by the specification of Scher. As provided above, Scher discloses a laminate having a print sheet 16 that provides a decorative background and a woven embedment sheet 18. (col. 5, lines 5-10) A laminate having a leather decorative layer would not need a print sheet. Hence, the proposed modification would render a portion of the laminate useless. All of these aspects teach away from using a decorative layer consisting essentially of a leather material.

The rejection also provides that Schlup explains that certain improvements in HLP are needed in structural composites such as the structural composite of Scher. Applicants disagree. First, the disclosure within Schlup that there is an alleged need for improved composite materials does not mean that the disclosure of Schlup now has utility within every item having leather. On the contrary, as disclosed above, the desirability of having a leather decorative layer is the feel, smell and touch of the leather decorative laminate – which is not present with the fully impregnated and polymerized leather of Schlup.

For at least the reasons provided above, applicants respectfully request that the rejection be withdrawn and the present application be passed to allowance.

Scher in view of Schmooch:

The rejection describes Schmooch as teaching "a leather-containing composite material used in structural composite materials in applications of heat and/or pressure" and is "considered to be equivalent to Applicant's claimed leather or bonded leather material". The rejection provides that it would have been obvious to one of ordinary skill

in the art to have modified the composite material of Scher to use the leather composite material of Schmoock. Applicants respectfully traverse the rejection and direct the Examiner to the comments above regarding Scher.

Schmoock discloses a leather-containing laminate that includes a coating applied to a leather substrate. The coating includes an outer layer and an inner layer disposed between the outer layer and the leather substrate. The inner layer is disposed between the outer layer and the leather substrate. The inner layer adheres to the uneven side of the leather substrate and serves as a means for filling or at least substantially filling the surface irregularities in the one side of the leather substrate. Schmoock discloses that the inner layer may be a thermoplastic or a lacquer. There is no disclosure of the leather substrate being bonded to an underlay layer impregnated with a thermosetting resin, or suggestion that it may be consolidated in a high pressure laminate.

Regarding the proposed combination of Scher and Schmoock, Scher teaches that it is desirable to produce an inexpensive, high pressure laminate that duplicates a natural product such as slate, leather or wood. To arrive at such a product, Scher discloses embossing techniques operable to create a laminate that looks like but is less expensive than a laminate with a leather decorative layer. Hence, Scher provides inexpensive alternatives to a laminate that includes a leather decorative layer and therefore teaches away from including a leather decorative sheet. The fact that Schmoock discloses a leather coating that may enable less expensive leather to be used, does not avoid the fact that Scher teaches away from using a leather decorative layer.

Scher in view of Hiers:

The rejection describes Hiers as teaching the use of leather containing animal hides (see 1:6-9) in a non-woven composite under a hot press. The rejection provides that it would have been obvious to one of ordinary skill in the art to have modified the composite material of Scher “to use the leather composite material of Schlup”. Applicants understand the rejection to mean Hiers instead of Schlup. If applicants’ understanding is incorrect, applicants respectfully request the Examiner so indicate. Assuming the understanding to be correct, applicants respectfully traverse the rejection and direct the Examiner to the comments above regarding Scher.

In addition, applicants direct the Examiner to: 1) col. 1, lines 1-23 of Hiers which describe the disadvantages of using natural leather; 2) col. 2, lines 45-56 which disclose that it is an object of the invention to provide an *artificial* leather; and 3) col. 4, lines 16-26 which describe a major feature of the invention is a process for producing a leather substitute material. The leather substitute material disclosed by Hiers involves a skin coating applied to a fibrous substrate (see col. 6). In short, the material disclosed by Hiers does not consist essentially of (or any portion of) a leather material.

Consequently, the combination of Scher and Hiers does not arrive at the claimed laminate, nor is the claimed laminate predictable in view thereof. This is particularly true in view of the teaching away by the references described above (e.g., Scher's teaching to use paper in place of leather, and Hiers' teaching of using an artificial leather).

For at least the reasons provided above, applicants respectfully request that the rejection be withdrawn and the present application be passed to allowance.

17. Claims 6-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Scher in view of Schlup or Schmook, or alternatively in view of Hiers.

Applicants respectfully direct the Examiner to the remarks above regarding the proposed combination of Scher and Schlup, or Schmook, or Hiers. For at least those reasons, applicants respectfully submit that claims 6-8 are not obvious in view of the cited references and request the rejection be withdrawn.

18. Claims 4 and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Scher in view of Schlup or Schmook of Hiers, and further in view of 6,558,799 ("Takeuchi").

Applicants respectfully direct the Examiner to the remarks above regarding Scher, Schlup, and Schmook, and the proposed combinations thereof. For at least the reasons identified, applicants respectfully submit that the laminate of claims 4 and 9 is not obvious in view thereof.

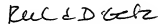
The rejection indicates that Takeuchi is relied upon as disclosing a substrate consisting of plywood, fiberboard, or particleboard. Applicants respectfully submit that

the addition of Takeuchi does not overcome the shortcomings identified above with respect to the combined teachings of Scher, Schlup, and Schmoock.

For at least the reasons provided above, applicants respectfully request that the rejection be withdrawn and the present application be passed to allowance.

In view of the fact that all of the rejections and objections have been traversed, applicants respectfully request the aforesaid rejections and objections be withdrawn and the present case be passed onto allowance. Please charge our Deposit Account No. 50-3381 for the one-month extension of time and RCE fees, as well as any additional fee that may be due in the present application.

Respectfully submitted,



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